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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 3

Complete if Known

Application Number	10/600,364
Filing Date	06/21/2003
First Named Inventor	Iris G. Chao
Art Unit	1633
Examiner Name	Janet L. Epps-Ford
Attorney Docket Number	

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 5/908,029	06/01/1999	Knudson et al	p 6, column 2, line 54-67
		US- 5/645,587	07/08/1997	Chanda et al	p 4 column 1, line 31-37
		US- 4/098,571	07/04/1978	Miyata	p 11, column 1, line 31-37
		US- 5/968,093	10/ /1999	Kranz	p 7, column 2, Line 39-58
		US- 5/968,090	10/ /1999	Batchcliff et al	p 9, column 1, Line 14-16
		US- 5/766,584	06/ /1998	Edelman et al	p 10, column 2, Line 9-13
		US- 6/287,317	09/ /2001	Makower et al	p 29, column 1, Line 10, 27-31
		US- 5/624,437	04/ /1997	Freeman et al	p 7, column 2, Line 26-30
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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10 * First CN OA 6/23/2006 cited CN 1199600A “Medical Laser for Cutting and Punching” published by Chinese Electrical Institute on 11/25/1998 and believed it meant the same. However, the application is reversed from traditional principle, and thus, no way to made it without the scientific discovery and creative work. Plus, there is no such device in the world with such treatment in hospital yet. Besides, the referral is for cutting and punching the heart muscle, which the disclosure did not get involved. The case is lost because I am here and can not carry it on.

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20 Lecture and award: “Reversed Bypass for Eye, Brain and Cardiovascular Ischemia” by Jin R. Zhao, in 3rd International Ophthalmologic Conference, Beijing, 11/11/2003:

ABSTRACT

 Upon New Patterns (Behaviors) of New Vessel Formation found in Nebraska donated human tissues, a new method is induced to grow/culture artificial graft in situ. The system comprises a material, device, and method of making. The new concept is based on blood flow’s intending to search for another blood flow and endothelial cells’ intending to follow the dynamic leading force of the blood flow to line over the blood flow to form a circuit. The 1st step of this method is making a lumen opening on a vessel wall to induce endothelial cells
30 to spread out and thereafter, the 2nd step is making the wall in situ, which is reversed from tradition. The graft made thereof comprises a solidifiable adhesive fluid, suitable to form an extravascular solid bond. The device is selected from ice, laser, balloon, puncher, and needle. The embodiments include heart, brain, eye, shared tube, and vascular bypass. The vascular mode includes a reversed bypass from an artery to a vein network. This system is also useful for repairing tubular gland, ureter, fallopian tube, and lymph duct.

Lecture as Honorable Visiting Scholar: “Vessel Cultured in Situ for Eye, Brain and Cardiovascular Ischemia” by Jin R. Zhao at HeBei XingTai Eye Hospital, China, 3/2004:

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ABSTRACT

As same as above.

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Phone#: 571-272-0757, Fax#: 571-273-0757

Patent applications and lectures cumulative to Appn No. 10/600,364,
“Method, Material, and Device of Making Graft”

Paired Chinese Patent Applications filed same day by same inventor, Jin R. Zhao in Beijing,
11/30/2003. Both mean PCT of Appn. No: 10/600,364.

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1) Design Patent “*Punch Device for Artificial Vessel*”, ZL200320113710.2, issued 02/23/2005.

ABSTRACT

The disclosure provided a punching device for making artificial vessel. The punch device is selected from a needle, cutter, laser, 2 phase solid-liquid lumen shaper, circular driller, and their combination thereof. The laser apparatus contains a single wave, made of an electrical stabilizer, a laser generator, a laser focus device, a transmission, a laser probe, and a laser beam focusing on a vessel wall, which is removed once opening an artificial lumen. The laser probe includes a micro focusing to push the focus gradually. The goal is to make a lumen having a diameter from 8 microm (μ) to 3 mm. The new lumen contains two openings connected with the two different lumens from two side vessels. The device is easy to use, safe, and effective, which can not be induced from current vessel manufacture apparatus and material.

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2) Utility patent application “Method and Device of Making Artificial Vessel” CN
2003101103312 filed 11/30/2003. *

ABSTRACT

Upon discovered new patterns (behaviors) of neovascularization, a material, device and method are induced to grow/culture artificial graft in situ. The new concept is based on blood flow's intending to search for another blood flow and endothelial cells' intending to follow the dynamic leading force of the blood flow to line over the blood flow to form a circuit. The 1st step of this method is making a lumen opening on a vessel wall to induce endothelial cells to spread out and thereafter, the 2nd step is making the wall in situ, which is reversed from tradition. The graft made thereof comprises a solidifiable adhesive fluid, suitable to form an extravascular solid bond and the final product is an artificial vessel. The device is selected from ice, laser, balloon, puncher, and needle. The embodiments include heart, brain, eye, shared tube, and vascular bypass. The vascular mode includes a reversed bypass from an artery to a vein network. This system is also useful for repairing tubular gland, ureter, fallopian tube, and lymph duct.

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